City of Takoma Park Urban Forest Re-Forestation Plan

Purpose

- Develop a plan that will establish benchmarks for the measurement of Takoma Park's tree canopy.
- If data suggests an overall canopy deficit, increase the canopy cover by planting more trees in the public spaces and develop a plan to assist private property owners in planting on private lands.
- Ensure the health of Takoma Park's trees on private and public property.
- Develop a desired canopy that will become an on going goal.

Scope

The implementation of the plan will impact the operations of the Urban Forest Division of the Department of Public Works. All properties, public and private, could also be affected by the addition of canopy cover in the City.

Situation

Though formal data has yet to be obtained, there is a strong feeling among the citizens and city leadership that the canopy cover in the City of Takoma Park is decreasing over time.

The City Administration is committed to correctly identifying the trend and to create a plan to aggressively plant trees on public property and to create incentives for private property owners to plant more trees on their property as well.

Mission

The mission of the Urban Forest Re-Forestation Plan is to identify optimal tree canopy cover (benchmark), evaluate current City of Takoma Park conditions, and then develop a comprehensive long term plan to reach and maintain defined optimal tree canopy.

Plan Of Action

First, information needs to be acquired to determine the optimal canopy cover and green spaces for a city of this size and location. Second, the City needs to establish what exactly the status is of Takoma Park's tree canopy in relation to the optimal canopy cover. Third, the City needs to set a plan to achieve the goal of optimal tree cover and have an additional plan to maintain that level. While these goals are being met, the City needs to be cognizant of the factors that make a healthy urban forest and see that the City is acting in support of them. The City needs to maintain species diversity, age diversity, try to keep trees healthy and replace hazardous trees with more appropriate selections. This applies to both public and private property.

Execution

Information Retrieval

1. Acquire Landsat data from American Forests. This satellite imaging data will enable Takoma Park to view past canopy cover trends to get an idea of how recent trends have been developing. It has a 30 meter satellite imaging resolution, which is not high resolution by today's standards, but will give Takoma Park accurate enough information to make good assumptions of past patterns. Cost of the information is free.

2. Purchase City Green Analysis software from American Forests. This software will enable Takoma Park to view urban forest canopy cover trends in the present and future by analyzing data and separating the hardscape from the canopy cover. It has a 4 meter satellite imaging resolution. The software has been purchased from current Urban Forest Division funds.

3. Obtain satellite imaging data from the Department of Environmental Protection (DEP) of Montgomery County that could also help in determining canopy cover benchmarks and changes. There is no cost for the data.

4. Upgrade City tree inventory (which only includes trees on public property). Currently the City of Takoma Park has TreeKeeper 6 inventory software from Davey Resource Group. Davey has upgraded to now have TreeKeeper 7 software. The new software is much more user friendly and has been purchased by the City through current Urban Forest Division funds.

5. Acquire Arc View software from Davey Resource Group and have it assimilated into the park tree data. Currently, no visuals exist for the park data and written descriptions of locations are very inefficient when locating specific trees. This software has been purchased using current Urban Forest Division funds.

Acquiring Plant Material for Public Property

1. Increase current planting budget of $10,000 per year to $35,000 per year. Currently, $10,000 will get approximately 30 to 35 two inch caliper trees to plant in the right-of-way. This is pure conjecture, but the data would probably tell us to ramp up our right-of-way planting to maybe 75 trees per year which would be $25,000. The additional $10,000 would be for purchasing 150 to 200 smaller trees to hold in the nursery.

2. Develop source for affordable trees. This would entail purchasing trees at a younger age and keeping them until they are more mature and ready for permanent planting. The State of Maryland has a program where the City can purchase 1 inch to 1 ½ inch diameter trees at a discount rate of $20.00 per tree. Purchases can be made twice a year, in the fall and spring. A sample of the species offered from the state this fall are: bald cypress, green ash, red oak, pin oak, willow oak, redbud, red maple, river birch, crabapple, sycamore, tulip poplar, and flowering dogwood. In the past they have also offered black gum, persimmon, mountain ash, white pine, and black pine.

3. Private nurseries can provide a good species diversity of smaller plant material but cost will seriously limit the number of trees purchased. The average cost of a 24 inch tall tree (oak, beech, etc.) would be up to $60.00 per tree with roughly 5% inflation increase in price each year.

4. Establishment of tree storage sites (or expanding or Public Works "nursery" area). Currently, the space for trees in Public Works is limited with room for approximately 30 to 50 trees in 5 gallon containers. Possible additional areas are behind the maintenance/gardener building and the open space area across Oswego Avenue from Public Works. The area behind the maintenance/gardener building has approximately 2080 square feet available that would accommodate between 70 and 100 trees in 5 gallon containers. The open space area across Oswego Avenue from Public Works has approximately 3600 square feet available that would accommodate between 120 and 180 trees in 5 gallon containers.

Acquiring Plant Material for Private Property Use

1. Keep trees on hand (in Public Works nursery areas) to sell to private property owners at reduced cost to give more incentive to increase city canopy cover.

2. Trees to be obtained from State sources or private nurseries, held in Public Works tree storage sites, and then resold at a discount to homeowners when the trees are larger.

3. Provide a list of acceptable contractors or instructional information so citizens can plant their own trees.

Execution Of Responsibilities

Public Works Director

Directs and supervises level supervision to execution of the plan.

City Arborist

1. Acquire information for benchmark of Takoma Park's optimum canopy cover.

2. Establish status of Takoma Park's canopy cover in relationship to the optimum canopy cover.

3. Upgrade inventory to facilitate updates and accuracy.

4. Purchase trees from State and private sources.

5. Store trees in secured location.

6. Coordinate public property planting with in house crews and contractor crews.

7. Develop/prepare nursery stock sites.

8. Monitor tree canopy increases and present data to City Council biannually.

9. Maintain and increase tree canopy cover as needed.

10. Ensure proper urban forest health by using arboriculture standards in species diversity, age diversity, insect and disease control, and replacing hazardous tree.

City Gardener
Supervise in house planting crews and ensure the new city "nursery" trees get proper watering.

City Gardener Staff
Execute in house planting of trees and do scheduled watering of city "nursery" trees.

Public Works Administration Staff
Maintain and update inventory as needed.

Coordination

- Create PR campaign to inform citizens of efforts to increase canopy by planting trees by using *Takoma Newsletter*, *Takoma Gazette*, *Takoma Voice*, City website, City cable channel and mailings.
- Do civic notification on how citizens can help and/or acquire trees.
- Interdepartmental coordination with other facets of the City to create a good information flow.
- The Urban Forest Division's budget would require an additional $35,000 to implement this program.

Funding Possibilities

- Raise taxes by ½ cent per $100.00 of assessment. This would generate approximately $43,000.00 for the Re-Forestation Plan.
- Charge homeowners $25.00 for waivers. Homeowners currently pay nothing when they receive a waiver when applying to remove a tree. With 105 waivers issued last year, the City could anticipate generating approximately $2,625.00 by this method.
- Charge homeowners $50.00 instead of $25.00 for tree removal permits and use the extra $25.00 for the Re-Forestation Plan. With 125 permits issued last year, the City could anticipate generating approximately $3,125.00 by this method. If the entire $50.00 was put toward the Re-Forestation Plan, approximately $6,250.00 could be generated.